



Plate I. Syowa Base in summer.

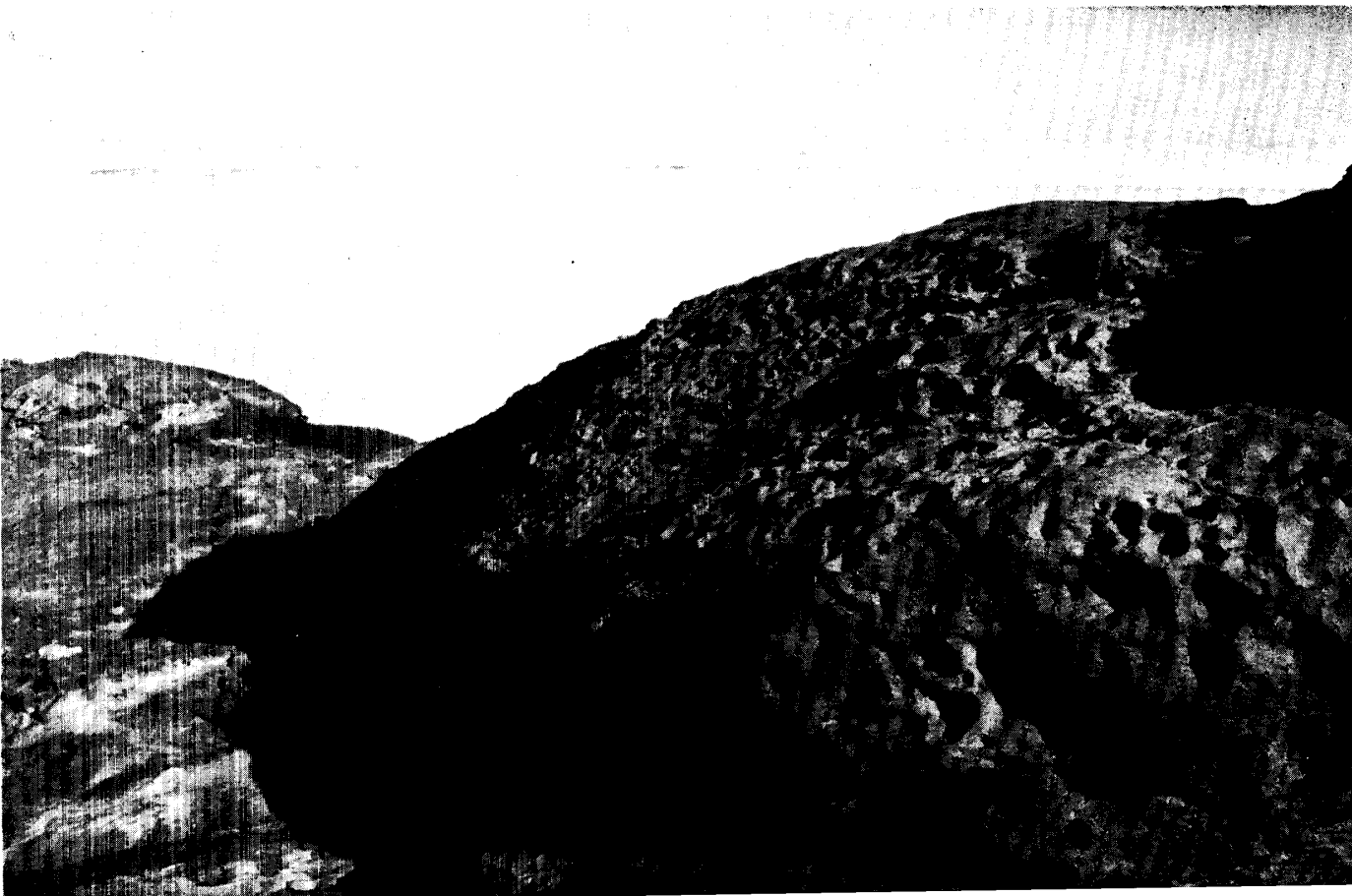
## EXPLANATION OF PLATE II

- a.** Outcrops of hornblende gneiss showing surface feature of the gneiss. Mountains in the upper left background are those of Langhovde and Skarvsnes districts.
- b.** Cellular holes in pyroxene gneiss. Ice sheet of the Antarctic continent over the Ongul Strait in the background.

a



b



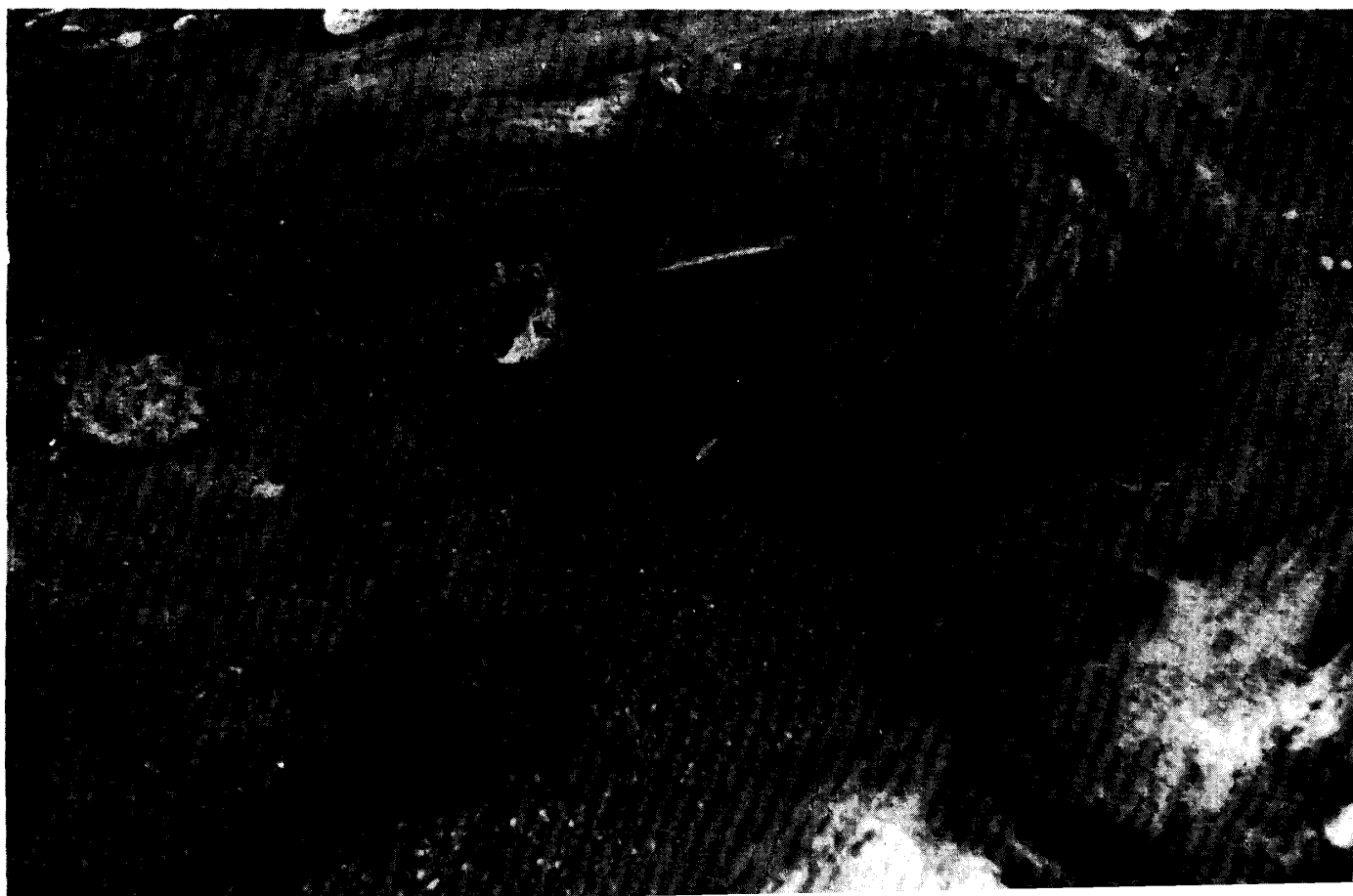
### EXPLANATION OF PLATE III

**a & b.** Small scale folds of metabasite in the central part of the island.

a



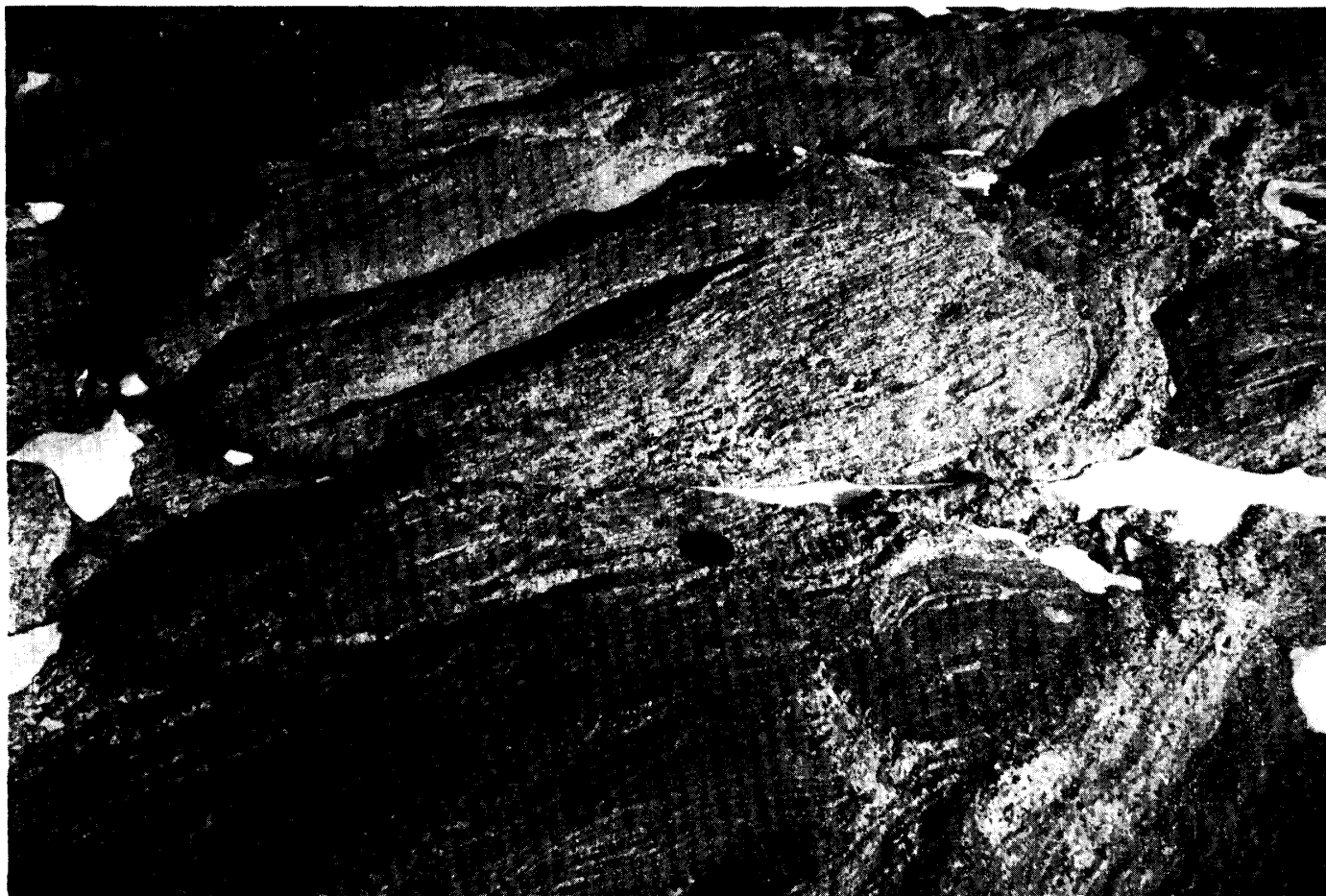
b



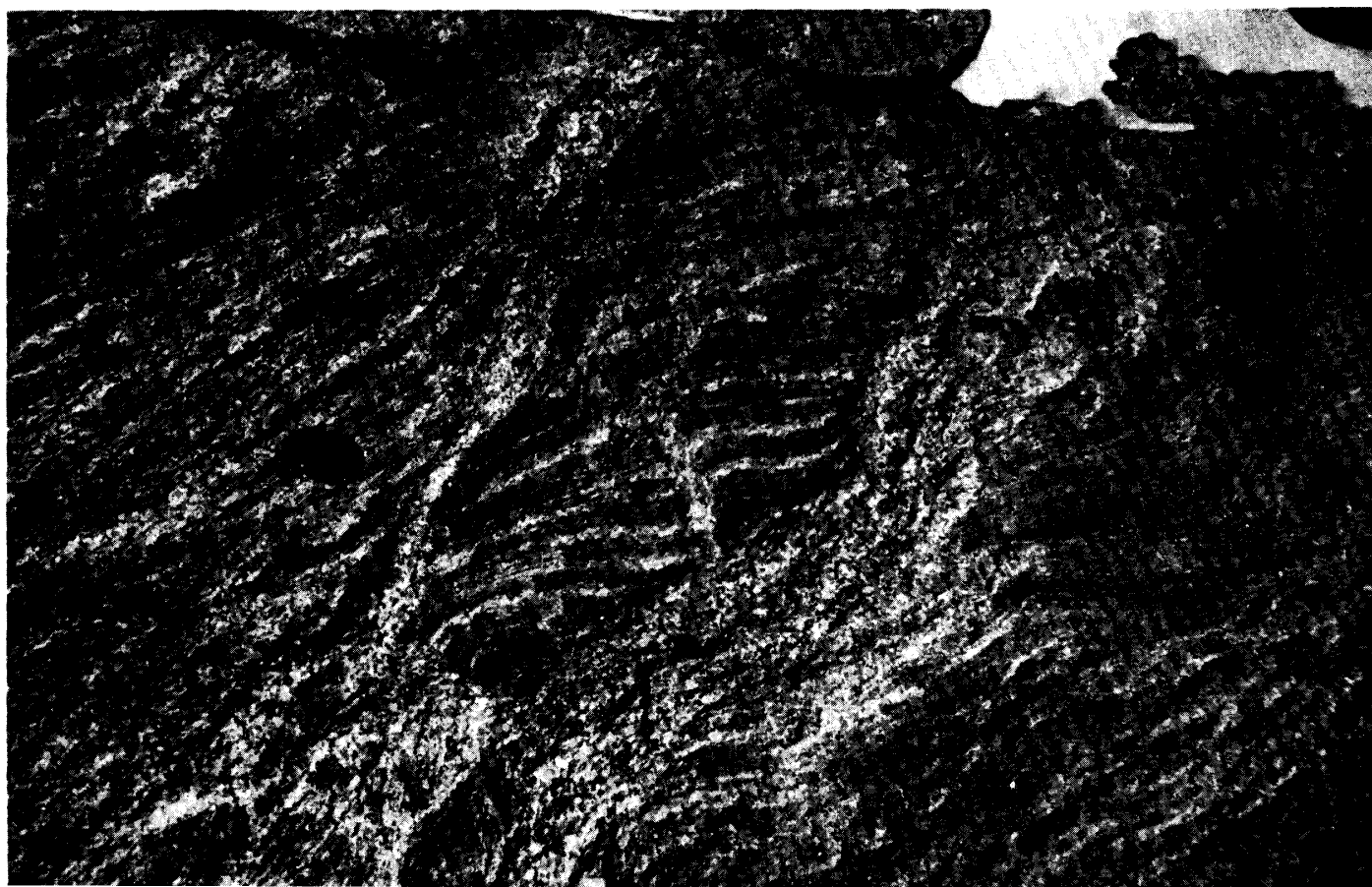
#### EXPLANATION OF PLATE IV

- a.** Feldspathic portion originating in pyroxene gneiss in the northeastern part of the island.
- b.** Agmatitic pyroxene gneiss in feldspathic portion at the same place.

a



b



#### EXPLANATION OF PLATE V

- a.** Hornblende pegmatites in pyroxene gneiss.
- b.** Pegmatitic portion in pyroxene gneiss.



**a**



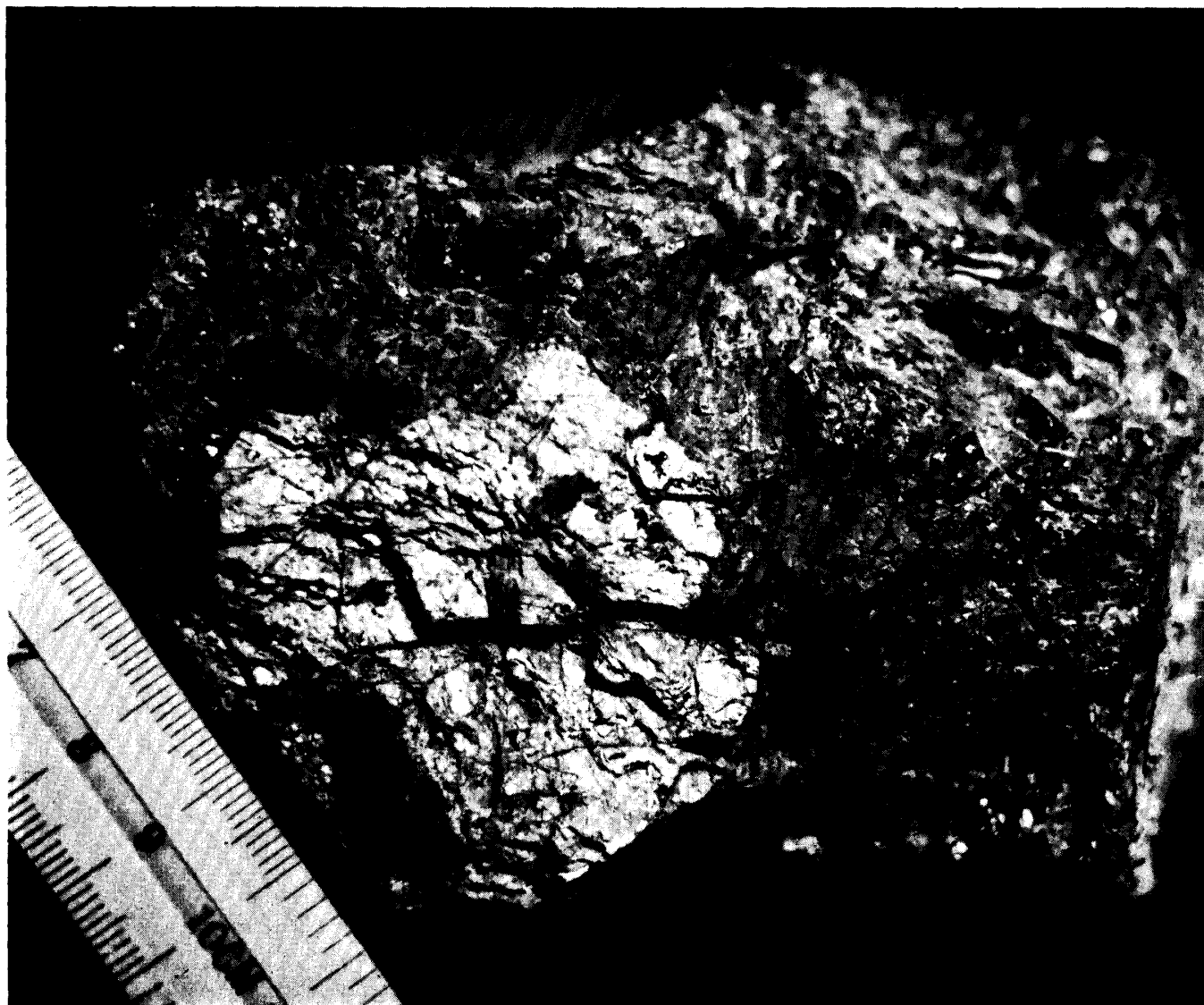
**b**



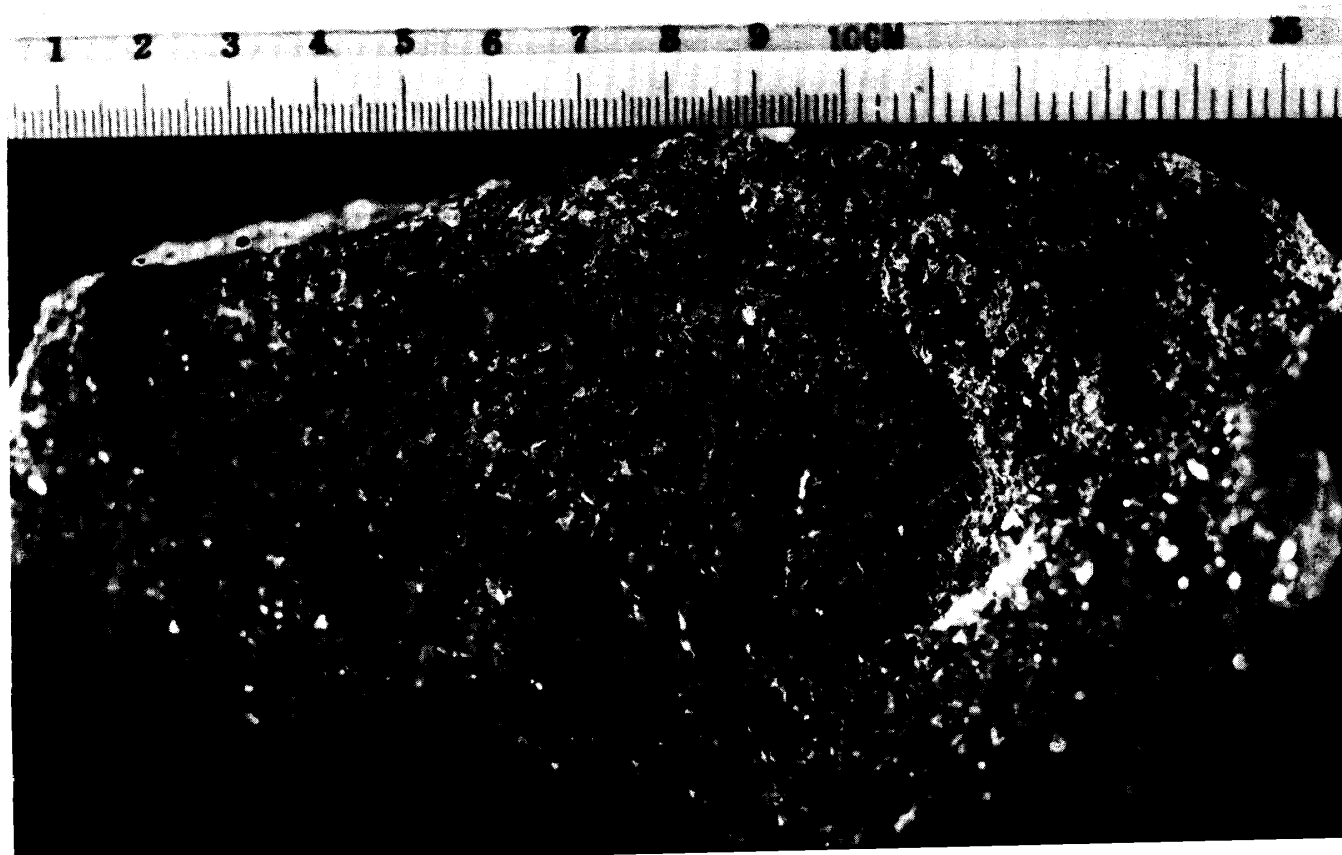
### EXPLANATION OF PLATE VI

- a.** Pyrrhotite are showing a single crystal 5 cm in diameter.
- b.** Molybdenite flakes in pyroxene amphibolite.

a



b



## EXPLANATION OF PLATE VII

### Photomicrographs

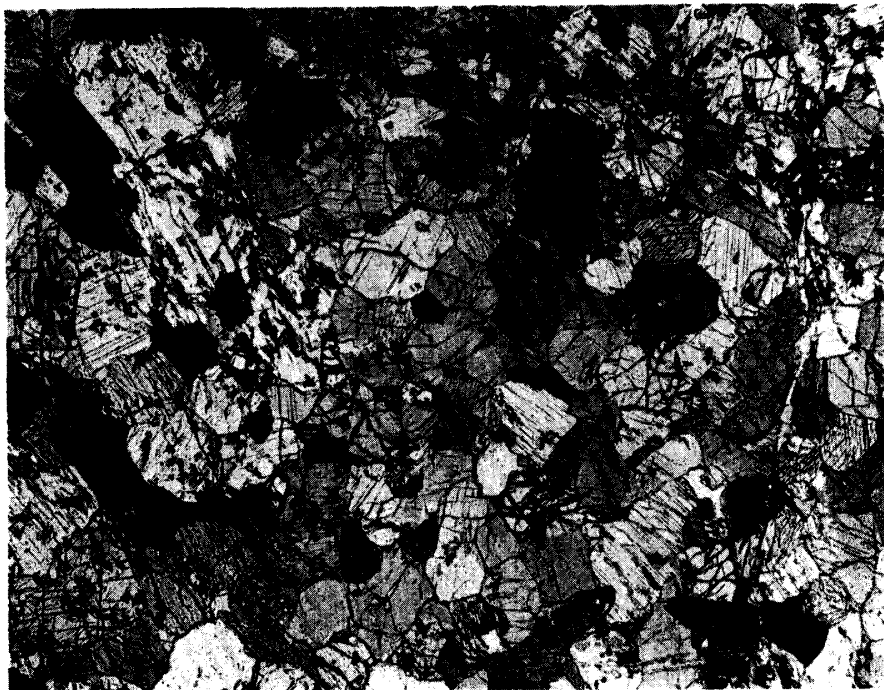
- a.** Pyroxenite. Small olivine grains (white) in hypersthene porphyroblast (grey).  $\times 20$ . Crossed nicols.
- b.** Pyroxene amphibolite. Hypersthene, diopside, hornblende biotite.  $\times 20$ . Crossed nicols.
- c.** Garnet bg. pyroxene amphibolite. Garnet porphyroblast including plagioclase, hornblende and biotite.  $\times 20$ . Crossed nicols.

Plate VII

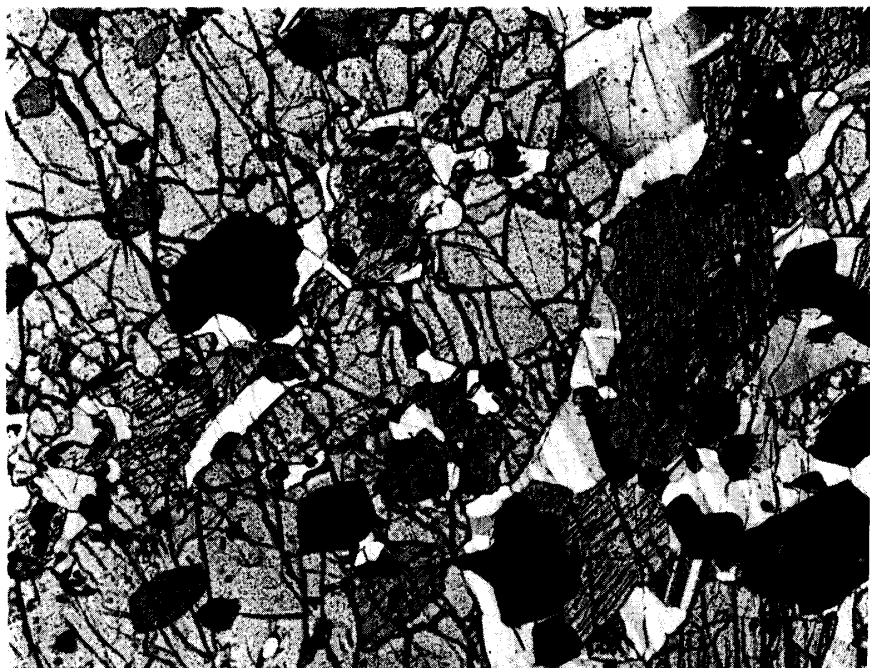
a



b



c



## EXPLANATION OF PLATE VIII

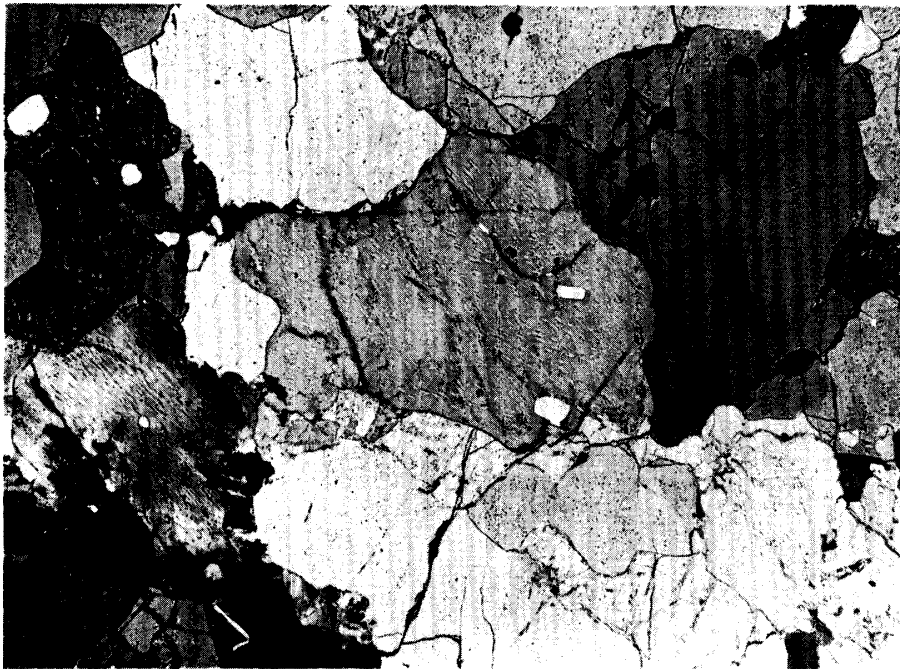
### Photomicrographs

- a.** Basic enderbitic pyroxene gneiss. Hypersthene in right center, biotite in left center (dark grey), plagioclase showing zonal extinction and hornblende.  $\times 20$ . Crossed nicols.
- c.** Charnockitic pyroxene gneiss. Hypersthene (dark grey), potash-feldspar with perthite, quartz and plagioclase.  $\times 20$ . Crossed nicols.
- c.** Feldspathic rock. Well-twinned plagioclase.  $\times 20$ . Crossed nicols.

a



b



c



## EXPLANATION OF PLATE IX

### Photomicrographs

- a.** Feldspathic rock. Hypersthene decomposed to biotite and sericite.  
×20. Crossed nicols.
- b.** Charnockitic pyroxene gneiss. Hypersthene (dark), hornblende,  
potash-feldspar with perthite, biotite and quartz. ×20. Crossed nicols.
- c.** Hornblende gneiss. Hornblende, potash-feldspar with perthite quartz  
and plagioclase. ×20. Crossed nicols.

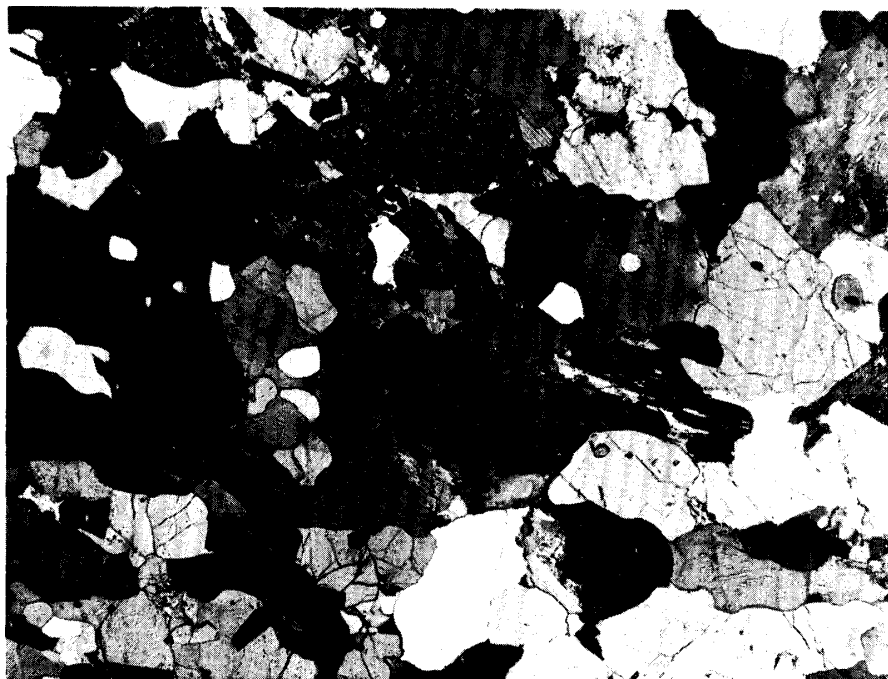


Plate IX

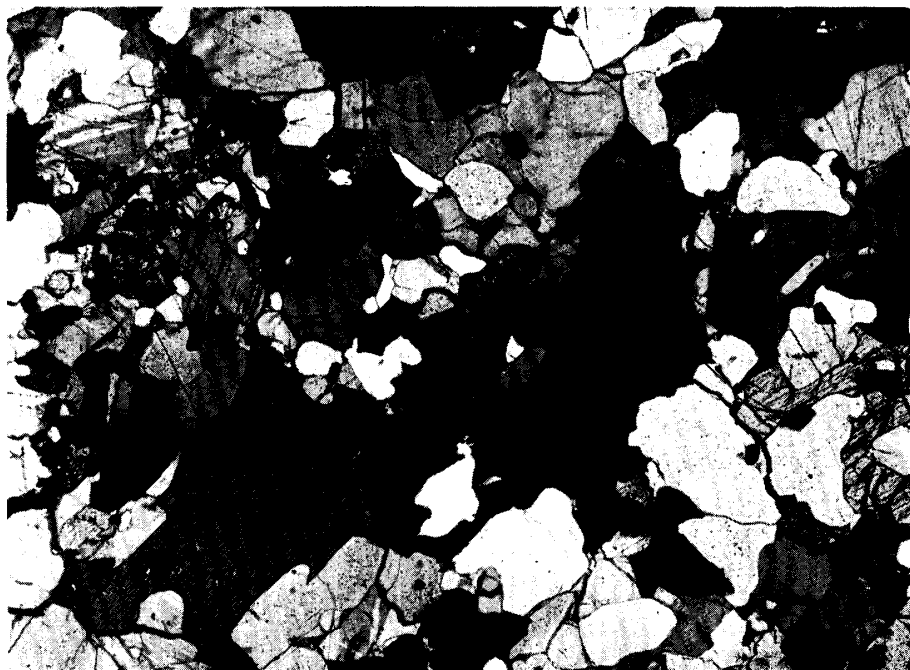
a



b



c

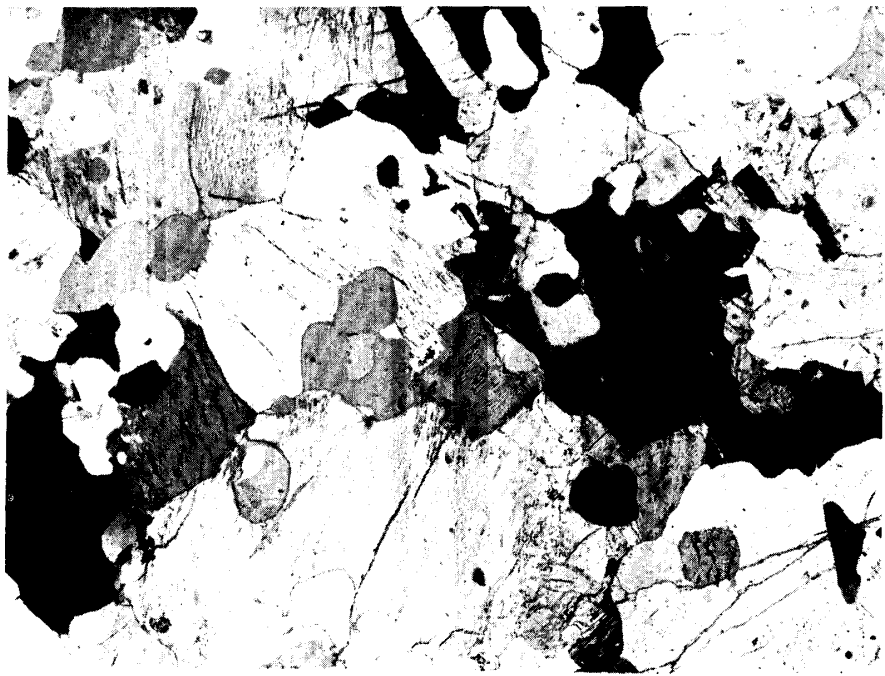


## EXPLANATION OF PLATE X

### Photomicrographs

- a.** Hornblende gneiss. Hornblende (black), potash-feldspar with perthite, plagioclase and quartz.  $\times 20$ . Crossed nicols.
- b.** Hornblende gneiss. Hypersthene relict, potash-feldspar with perthite, plagioclase and quartz.  $\times 20$ . Crossed nicols.
- c.** Garnet gneiss. Garnet, plagioclase, potash-feldspar, quartz and biotite.  $\times 20$ . Crossed nicols.

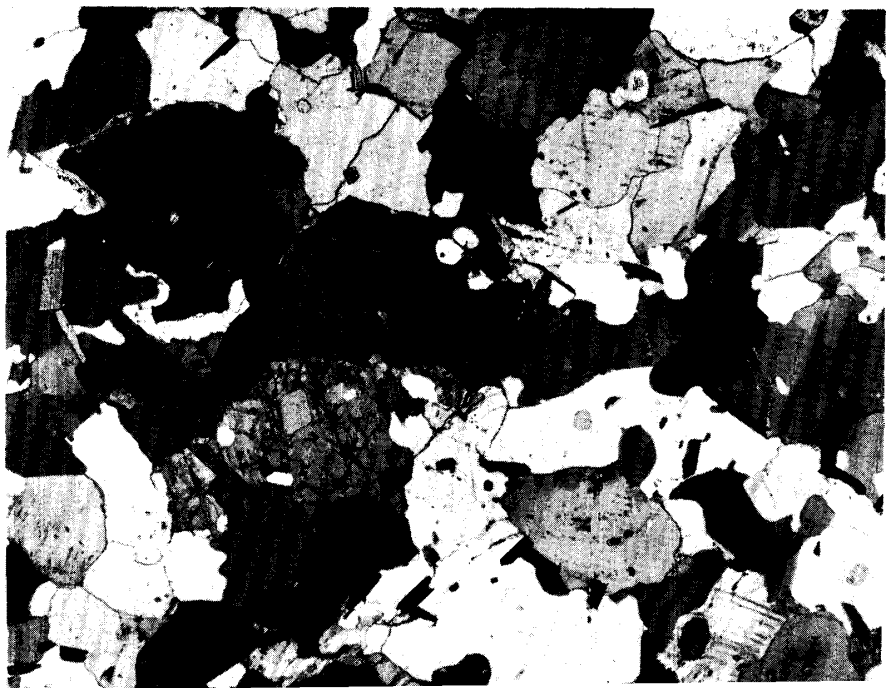
a



b



c



## EXPLANATION OF PLATE XI

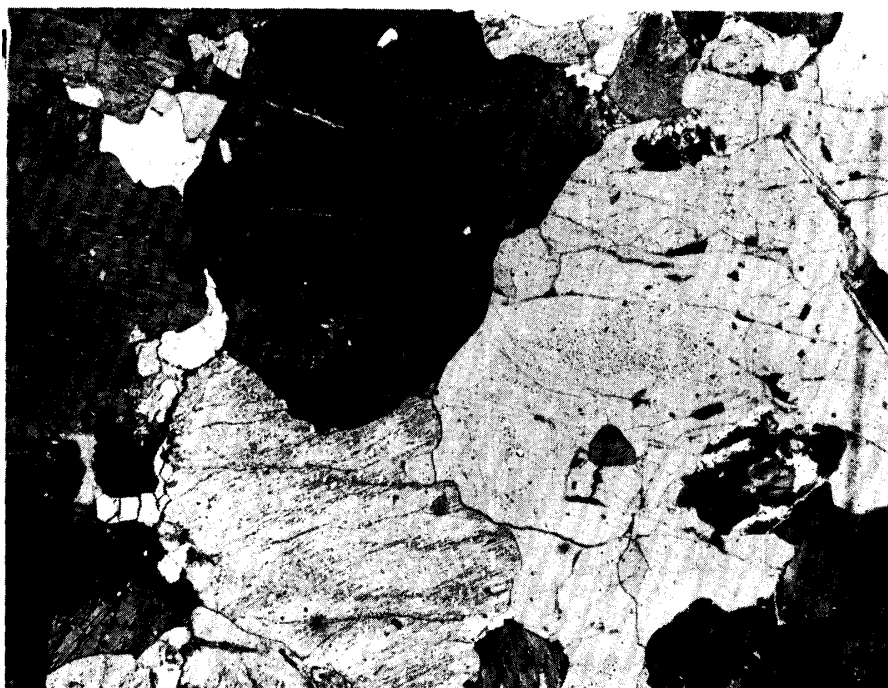
### Photomicrographs

- a.** Granitic gneiss. Potash-feldspar with perthite patch, plagioclase and quartz.  $\times 20$ . Crossed nicols.
- b.** Hornblende granite. Potash-feldspar with microcline perthite, hornblende (black) and quartz.  $\times 20$ . Crossed nicols.
- c.** Hornblende granite. Potash-feldspar with microcline twinning, quartz, plagioclase and hornblende.  $\times 20$ . Crossed nicols.

a



b



c

